UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/685,238	10/10/2000	Daniel Burton	26530.18 (IDR-445)	3339

47699	7590	03/16/2005

HAYNES AND BOONE, LLP
901 MAIN STREET
SUITE 3100
DALLAS, TX 75202-3789

EXAMINER
LEZAK, ARRIENNE M

ART UNIT	PAPER NUMBER
2143	

DATE MAILED: 03/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES PATENT AND TRADEMARK OFFICE

MAILED

MAR 1 5 2005

Technology Center 2100

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Application Number: 09/685,238
Filing Date: October 10, 2000
Appellant(s): BURTON ET AL.

_____

For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 13 January 2005.

1.   *Real Party in Interest*

A statement identifying the real party in interest is contained within the brief.

2.   *Related Appeals and Interferences*

A statement indicating Applicant is unaware of any related appeals or

interferences is contained within the brief.

3.   *Status of Claims*

The statement of the status of the claims contained within the brief is correct.

4.   *Statement of Amendments After Final*

The Appellant's statement of the status of amendments after final rejection

contained within the brief is correct.

5.   *Summary of Invention*

The summary of the invention contained within the brief is correct.

6.   *Issues – Grounds of Rejection to Be Reviewed on Appeal*

The Appellant's statement of the issues within the brief is correct.

7.   *Grouping of Claims*

The rejection of Claims 1-7 stand or fall together.

The rejection of Claims 8-17 stand or fall together.

The rejection of Claims 18-24 stand or fall together.

The rejection of Claims 25-27 stand or fall together.

The rejection of Claim 28 stands alone.

The rejection of Claims 29-31 stand or fall together.

The rejection of Claims 32 & 33 stand or fall together.

The rejection of Claim 34 stands alone.

8.   *Claims Appealed*

The copy of the appealed claims contained in the Appendix to the brief is correct.

9.   *Prior Art of Record*

Examiner relied upon the following prior art in the rejection of the claims under

appeal:

US 6,351,776 B1	O'Brien	05-2000/provisional priority to 11-1999
US 6,389,589 B1	Mishra	09-1998

"Role-Based Access Control", Ferraiolo, et al., National Institute of Standards

and Technology, *Proceedings of 15th National Computer Security Conference*,

1992.

10.   *Grounds of Rejection*

The following ground(s) of rejection are applicable to the appealed claims as

follows:

Claims 29-31 are rejected under 35 U.S.C. § 102(e) over O'Brien ('776).

Claims 1-3, 8, 11-17, 19, 20, 25-28 & 32-34 are rejected under 35 U.S.C. §

103(a) over the combined teachings of O'Brien ('776) and Mishra ('589).

Claims 4-7, 9, 10, 18 & 21-24 are rejected under 35 U.S.C. § 103(a) over the

combined teachings of O'Brien ('776) and Mishra ('589) and Ferraiolo.

The above rejections are set forth in a prior Office Action mailed on 9 July 2004. The

art rejections from the Office Action are reproduced below:

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by
another filed in the United States before the invention by the applicant for patent or (2) a patent
granted on an application for patent by another filed in the United States before the invention by the
applicant for patent, except that an international application filed under the treaty defined in section
351(a) shall have the effects for purposes of this subsection of an application filed in the United States
only if the international application designated the United States and was published under Article 21(2)
of such treaty in the English language.

2.   Claims 29-31 are rejected under 35 U.S.C. 102(e) as being anticipated by US

Patent US 6,351,776 B1 to O'Brien.

3.   O'Brien discloses a user Internet file system comprising: a received folder that

contains folders representing files and folders that have been shared with a user and

the names of those who shared the files and folders with the user, and a friends folder

that contains the user's objects and community folders that contain information that are

of interest to the user, (pending Claim 29), a root similar to a home folder of the user,

(pending Claim 30), and wherein files and folders in the home folder are available at the

root of the file system, (pending Claim 31), (Abstract; Fig. 13; and Col. 20, lines 21-52).

4.   Therefore, this reference may reasonably be read to teach or describe every

element or claim limitation of Claims 29-31.

5.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

6.   Claims 1-3, 8, 11-17, 19, 20, 25-28 and 32-34 are rejected under 35 U.S.C.

103(a) as being unpatentable over US Patent US 6,351,776 B1 to O'Brien in view of US

Patent US 6,389,589 B1 to Mishra.

7.   Regarding Claims 1, 2, 25-27 and 34, O'Brien ('776) discloses a method and

system for configuring an Internet file system, comprising:

-       accessing, by a user, a server that is configured with an application on the

        Internet file system, (Abstract and Col. 4, lines 13-43);

-       creating, by the application, an Internet file system for the user, (Abstract);

-       storing, by a directory, a home folder of the user, wherein folders and files

        in the home folder are available at a root of the internet file system,

        (Abstract; Fig. 13; and Col. 20, lines 44-52); and

-       providing, by the application, a first folder and a second folder in a root of

        the home folder, the first folder containing folders that represent folders

        and files that have been shared with the user, the second folder containing

objects of the user and communities that are of interest to the user, (Fig.

13 and Col.20, lines 21-52).

8.   O'Brien ('776) does not specifically disclose or describe a method and system for

configuring an Internet file system comprising creating, by the application, an auxiliary

class containing a first attribute, a second attribute, and a third attribute, wherein the

first attribute is used to quickly find other users that the folders and the files in the home

folder have been shared with, the second attribute is used to store names of the other

users and a path of the folders and the files that have been shared with the user, and

the third attribute is used to allow the user and other users with common interests to

share folders and files of the common interest.

9.   Mishra ('589) discloses the implementation of a class store in a group policy for

purposes of application management utilizing the Windows NT Active Directory and a

LDAP class store schema, (Col. 4, lines 63-67; Col. 5; and Col. 6, lines 1-13).

10.   To incorporate the centralized class store of Mishra into the O'Brien method for

configuring an Internet file system would have been obvious to one of ordinary skill in

the art at the time of invention by Applicant. The motivation to combine the centralized

class store with the method for configuring an Internet file system is apparent in that the

LDAP directories are designed to manage network resources, and the O' Brien method

comprises an X-Drive, (Fig. 13), which is a network resource.

11.   Therefore, Claims 1, 2, 25-27 and 34 are unpatentable over the combined

teachings of O'Brien in view of Mishra.

12.   Regarding Claim 3, Mishra discloses a method further comprising attaching the auxiliary class to a user object when the folders and the files are shared with the user, (Col. 7). O'Brien in view of Mishra is relied upon for the teachings and motivation as discussed above relative to Claims 1, 2, 25-27 and 34. Therefore, Claim 3 is unpatentable over the combined teachings of O'Brien in view of Mishra.

13.   Regarding Claims 8 and 28, Mishra discloses a method for file sharing comprising: sharing, by a first user, a file with a second user; adding, by an application, the first user to a third attribute of the second user; adding, by the application, the second user to a third attribute of the first user; adding, by the application, a path of the shared file and a user name of the second user to a first attribute of the first user; adding, by the application, the path of the shared file and a user name of the first user to a second attribute of the second user; and making available, by the application, the first attribute through a folder of the second attribute, wherein the folder belongs to the second user, (Col. 19, lines 29-67 and Col. 20, lines 1-40). O'Brien in view of Mishra is relied upon for the teachings and motivation as discussed above relative to Claims 1, 2, 25-27 and 34. Therefore, Claims 8 and 28 are unpatentable over the combined teachings of O'Brien in view of Mishra.

14.   Regarding Claim 11, Mishra discloses a method for file sharing comprising placing, by the application, objects of the first user and the second user into a folder of the attribute that is located in an Internet file system of the first user and in an Internet file system of the second user, (Col. 19, lines 5-18). O'Brien discloses a "shared Internet storage resource, user interface system and method", (title). O'Brien in view of

Mishra is relied upon for the teachings and motivation as discussed above relative to

Claims 1, 2, 25-27 and 34. Therefore, Claim 11 is unpatentable over the combined

teachings of O'Brien in view of Mishra.

15.   Regarding Claim 12, Mishra discloses a method for file sharing comprising

sharing the objects by the first user and the second user, (Col. 2, lines 15-31). O'Brien

in view of Mishra is relied upon for the teachings and motivation as discussed above

relative to Claims 1, 2, 25-27 and 34. Therefore, Claim 12 is unpatentable over the

combined teachings of O'Brien in view of Mishra.

16.   Regarding Claims 13-17, Mishra discloses a method for file sharing wherein the

first attribute is a shared path attribute, (pending Claim 13), the second attribute is a

received path attribute, (pending Claim 14), the third attribute is a friend attribute,

(pending Claim 15), wherein the first, second and third attributes are located in a

directory, (pending Claim 16), and wherein the first user has a second attribute and the

second user has a first attribute, (pending Claim 17), (Col. 4, lines 63-67 and Col. 5,

lines 1-22). O'Brien in view of Mishra is relied upon for the teachings and motivation as

discussed above relative to Claims 1, 2, 25-27 and 34. Therefore, Claims 13-17 are

unpatentable over the combined teachings of O'Brien in view of Mishra.

17.   Regarding Claim 19, Mishra discloses a method for file sharing wherein if there is

no corresponding user object, a new user object is created based on the information

provided, (Col. 5, lines 5-22). O'Brien in view of Mishra is relied upon for the teachings

and motivation as discussed above relative to Claims 1, 2, 25-27 and 34. Therefore,

Claim 19 is unpatentable over the combined teachings of O'Brien in view of Mishra.

18.   Regarding Claim 20, Mishra discloses a method for file sharing comprising

monitoring, by the script, interests the another user has submitted in the registration

form, (Col. 5, lines 5-67 and Col. 6, lines 1-14). O'Brien in view of Mishra is relied upon

for the teachings and motivation as discussed above relative to Claims 1, 2, 25-27 and

34. Therefore, Claim 20 is unpatentable over the combined teachings of O'Brien in view

of Mishra.

19.   Regarding Claims 32 and 33, Mishra discloses a directory comprising: a user

object; a home folder of the user, wherein the home folder is an attribute of the user

object; an auxiliary class attached to the user object when files are shared with the user;

a community folder that includes topics of interest to the user; and a group object

associated with each topic of interest, (pending Claim 32), and wherein the auxiliary

class is attached to the user object when the user shares files with other users,

(pending Claim 33), (Col. 4, lines 63-67; Col. 5, lines 1-67; and Col. 6, lines 1-13).

O'Brien in view of Mishra is relied upon for the teachings and motivation as discussed

above relative to Claims 1, 2, 25-27 and 34. Therefore, Claims 32 and 33 are also

unpatentable over the combined teachings of O'Brien in view of Mishra.

20.   Claims 4-6, 7, 9, 10, 18 and 21-24 are rejected under 35 U.S.C. 103(a) as being

unpatentable over US Patent US 6,351,776 B1 to O'Brien in view of US Patent US

6,389,589 B1 to Mishra in further view of "Role Based Access Control" by David

Ferraiolo and Richard Kuhn of the National Institute of Standards and Technology for

the Proceedings of the 15th National Computer Security Conference, 1992.

21.   Regarding Claims 4 and 5, Ferraiolo discloses a method for file sharing

comprising enabling the user to modify granted rights to the shared folders and the

shared files, (pending Claim 4), and enabling the user to disallow the sharing of the

folders and the files, (pending Claim 5), (P.2 – bottom and P.3 – top). O'Brien in view of

Mishra is relied upon for the teachings and motivation as discussed above relative to

Claims 1, 2, 25-27 and 34.

22.   To incorporate the Ferraiolo Role-Based Access Control functionality within the

O'Brien Shared Internet storage system would have been obvious to one of ordinary

skill in the art at the time of invention by Applicant. The motivation for the combination

is found within O'Brien wherein O'Brien provides a means by which individual users or

groups of users share Internet-stored files, (Col. 4, lines 13-43). To grant rights based

on individual roles or roles within groups would have been obvious and necessary

considering the very nature of a shared resource. Moreover, Role-Based Access

Control would also be an obvious functionality as incorporated within the Mishra class

store schema, as Mishra employs directory containers managed by specified group

policies, (Col. 4, lines 63-67). As noted above, granting rights based on individual roles

or roles within groups would have been obvious and necessary considering the very

nature of a shared resource.

23.   Therefore, Claims 4 and 5 are unpatentable over the combined teachings of

O'Brien in view of Mishra in further view of Ferraiolo.

24.   Regarding Claim 6, Ferraiolo discloses a method for file sharing comprising

populating the first folder with the stored names of the other users, (p.4), and Mishra

discloses a folder containing path information to files anf folders that have been shared

with the user, (Col. 12 and Col. 20, lines 37-40). O'Brien in view of Mishra in further

view of Ferraiolo is relied upon for the teachings and motivation relative to all Claims

discussed herein above. Therefore, Claim 6 is unpatentable over the combined

teachings of O'Brien in view of Mishra in further view of Ferraiolo.

25.   Regarding Claim 7, Ferraiolo discloses a method for file sharing comprising

creating communities of users with common interests, (p.4 – top), and Mishra discloses

storing communities as groups and users as members of groups, (Col. 4, lines 51-67

and Col. 5, lines 1-22). O'Brien in view of Mishra in further view of Ferraiolo is relied

upon for the teachings and motivation relative to all Claims discussed herein above.

Therefore, Claim 7 is unpatentable over the combined teachings of O'Brien in view of

Mishra in further view of Ferraiolo.

26.   Regarding Claims 9 and 10, Ferraiolo discloses a method for file sharing

comprising, if the first user modifies rights to the first attribute, determining by the

application which user the folder has been shared with and what rights the user has

been granted, (pending Claim 9), notifying the second user, by the application, that the

file has been shared with the second user, (pending Claim 10), (p.4). O'Brien in view of

Mishra in further view of Ferraiolo is relied upon for the teachings and motivation

relative to all Claims discussed herein above. Therefore, Claims 9 and 10 are

unpatentable over the combined teachings of O'Brien in view of Mishra in further view of

Ferraiolo.

27.   Regarding Claim 18, Ferriaolo discloses a method for creating user objects in a directory, comprising: if a user shares a folder with another user who is not registered with an application in the directory, creating a temporary user object with an email address as a name of the another user, (Ferriaolo, p.4), and Mishra discloses submitting, by the another user, a registration form; determining, by a script, if the email address corresponds with the another user; and if the email address corresponds with the another user, updating the temporary user object based on information provided in the registration form, (Mishra, Col. 5, lines 5-67 and Col. 6, lines 1-14). O'Brien in view of Mishra in further view of Ferraiolo is relied upon for the teachings and motivation relative to all Claims discussed herein above. Therefore, Claim 18 is unpatentable over the combined teachings of O'Brien in view of Mishra in further view of Ferraiolo.

28.   Regarding Claims 21-23, Ferriaolo in combination with Mishra discloses a method for creating user objects comprising associating each interest of the another user with a group object in a container of the application, (pending Claim 21), adding the another user as a member of each interest group, (pending Claim 22), and adding each interest group to a list of friends of the another user, (pending Claim 23), (Ferriaolo - p.4 and Mishra – Col. 4, lines 63-67; Col. 5, lines 1-21). O'Brien in view of Mishra in further view of Ferraiolo is relied upon for the teachings and motivation relative to all Claims discussed herein above. Therefore, Claims 21-23 are unpatentable over the combined teachings of O'Brien in view of Mishra in further view of Ferraiolo.

29.   Regarding Claim 24, Ferraiolo discloses a method for creating user objects wherein the information includes at least one item from a group consisting of: the email

address; a user name; a password; a first name; a last name; an address; and interests,

(p.4). O'Brien in view of Mishra in further view of Ferraiolo is relied upon for the

teachings and motivation relative to all Claims discussed herein above. Therefore,

Claim 24 is unpatentable over the combined teachings of O'Brien in view of Mishra in

further view of Ferraiolo.

11.   *Response to Arguments*

11.1   <u>Issue 1</u>

O'Brien ('776) in fact discloses every element of Claim 29, which claim is written
as follows:
    A user internet file system comprises:
        a received folder that contains folders representing files and folders that
    have been shared with a user and the names of those who shared the files and
    folders with the user; and
        a friends folder that contains the user's objects and community folders that
    <u>contain information that are of interest to the user, (Appeal Brief: p.7, lines 2-6).</u>

Appellant argues that O'Brien does not teach a user Internet file system comprising a

"received" folder and a "friends" folder. Examiner respectfully disagrees noting O'Brien

specifically teaches an Internet file system, (O'Brien - Col. 3, lines 7-14).

Per the specific claims language of Claim 29, Appellant defines a "received" folder to

be:

A.   a folder that contains folders

B.   representing files and folders that have been shared with a user and

C.   the names of those who shared the files and folders with the user

O'Brien specifically teaches:

A.   an "Internet hard drive" or "x:drive" shared Internet resource folder which

contains other folders such as "private" and "public" folders, (Figs. 13, 14 & Col. 3, lines

1-14 & 60-65). Examiner specifically notes that the names of the folders within

Appellant's specification are configurable, (Spec. p. 4, line 27), and as such, may have

any name.

B.   the "x:drive" is a high-speed access storage facility where files of any type as well

as metadata about the files may be stored hierarchically and within folders, (Fig. 13, 14

& Col. 3, lines 1-14 & 23-37), wherein said files are "shared" with any user having

access, (Col. 3, lines 60-65).

C.   the "x:drive" utilizes permissions to share files in addition to password protection

and/or other security protocols to limit or discriminate access, (Col. 3, lines 66-67 & Col.

4, lines 1-10). Examiner notes that in order for the system to limit or discriminate

access to users, it must maintain a list of user names and permissions, know as an

"access control list". Said list inherently comprises "user names and permissions" of all

users, including the names of others granting permission to share files with user as well

as names and permissions granted others by user.

Per the specific claims language of Claim 29, Appellant defines a "friends" folder to be:

A.   a folder that contains the user's objects and

B.   community folders that contain information that are of interest to the user

O'Brien specifically teaches:

A.   the "x:drive" is a high-speed access storage facility where files and folders of any

type, (public or private), as well as metadata about the files, may be stored, (Fig. 13 &

Col. 3, lines 1-14 & 23-37). Examiner notes that as Appellant's specification is silent to

an exact definition of "user's object", the term may be interpreted to include any file.

Examiner additionally notes that all (public and private) folders within an "x:drive" are

user objects, (and may contain additional user objects), which objects inherently have

access rights and inherently belong to the user, which is why the user may set the

privileges (access) on or to the same, (Col. 4, lines 1-6). Specifically, since user owned

"x:drive" files are available worldwide, (O'Brien – Col. 3, lines 12-14), the user must set

permissions in order to maintain data integrity.

B.   "public" and "private" folders, (Fig. 13), which folders inherently contain

information that is of interest to the user as evidenced by their mere presence within the

user "x:drive", which drive represents user chosen information. Moreover, as an

"x:drive" contains objects to be shared, (O'Brien – Col. 4, lines 1-6), anyone who

accesses the "x:drive" inherently has some interest in the objects stored therein.

        Thus, Examiner maintains the original rejection of Claim 29 in addition to Claims

30 & 31, which depend therefrom.

11.2   Issue 2

        The combined teachings of O'Brien ('776) and Mishra ('589) in fact render claims
1-3, 8, 11-17, 19, 20, 25-25 & 32-34 unpatentable, (Appeal Brief: p.10, lines 5-6).

Claim 1

Appellant specifically argues that the prior art does not teach:

"a first folder and a second folder in a root of the home folder, the first folder

containing folders that represent **folders and files that have been shared with the**

user, the second folder containing **objects of the user and communities that are of**

interest to the user; and

creating, by the application, an auxiliary class containing a first attribute, a

second attribute, and a third attribute, wherein the first attribute is used **to quickly find**

other users that the folders and the files in the home folder have been shared

with, the second attribute is used to store the **names of the other users and a path of**

the folders and the files that have been shared with the user, and the third attribute

is used to **allow the user and other users with common interests to share folders**

and files of the common interest." (*with emphasis added by Appellant*).

Examiner respectfully disagrees.

      a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach
               the claimed subject matter of Claim 1, (Appeal Brief: p.11, lines 25-27).

O'Brien clearly teaches a first and second folder in a root of the home folder,

(Figs. 13 & 14), wherein the first and second folders are preceded by a symbol which

looks like a "+" in a box, and which symbol is extremely well-known in the art to mean

that the folder which follows the symbol contains something, namely "user objects". In

this case, O'Brien clearly teaches several folders stemming from an "x:drive" root folder,

which several folders may obviously contain any files or objects shared with the user as

well as objects of the user and communities of interest to the user.

As Appellant notes that the names of the folders within Appellant's specification are configurable, (Spec. p. 4, line 27), and as such, may have any name, Examiner emphasizes that the names of the folders within O'Brien are irrelevant. Further, Examiner notes that as Appellant's specification is silent to an exact definition of "user's object", the term may be interpreted to include any file. Moreover, Examiner notes that the "x:drive" is a high-speed access storage facility where files of any type as well as metadata about the files may be stored hierarchically and within folders, (Fig. 13, 14 & Col. 3, lines 1-14 & 23-37), wherein said files are "shared" with any user having access, (Col. 3, lines 60-65). Thus, O'Brien's teaching of "private, public, skip the download" folders may obviously be read to be folders containing files and folders that have been shared with the user, (as they are a subset of the "x:drive" shared Internet storage resource), which files and folders are obviously objects of the user and represent anything, (including communities), which are of interest to the user by their very presence within the user's "x:drive".

Additionally, Examiner maintains that the specific organization of data within the folders is obviously one based strictly upon personal preference, and as such is not patentably distinct, as noted within MPEP § 2144(VI)(c), which reads as follows:

> In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950) (Claims to a hydraulic power press which read on the prior art except with regard to the position of the starting switch were held unpatentable because shifting the position of the starting switch would not have modified the operation of the device.); In re Kuhle, 526 F.2d 553, 188 USPQ 7 (CCPA 1975) (the particular placement of a contact in a conductivity measuring device was held to be an obvious matter of design choice).

Examiner further notes that the "x:drive" folder, (as well as all folders stemming

therefrom), utilizes permissions to share files in addition to password protection and/or

other security protocols to limit or discriminate access, (Col. 3, lines 66-67 & Col. 4,

lines 1-10). Thus, in order for the system to limit or discriminate access to users, it must

maintain a list of user names and permissions, know as an "access control list". Said list

inherently comprises "user names and permissions" of all users, including the names of

others granting permission to share files with user as well as names and permissions

granted others by user.

That noted, Examiner finds that O'Brien clearly teaches a first, second and third

attribute of an auxiliary class as quoted from paragraph 35 of the Final Office Action:

> Regarding Applicant's argument that neither O'Brien or Mishra teach providing a
> first and second folder creating an auxiliary class, Examiner observes the
> auxiliary class mentioned by Applicant within the spec (p.4, line 20), is a
> WebDAV user auxiliary class. Applicant's claims are silent as to the use of a
> WebDAV user auxiliary class. Mishra teaches the use of many aux classes, (Col.
> 2, lines 15-21 and Col. 11, lines 56-66 - note ADSI is well-known to be a COM
> interface to Active Directory ™), which auxiliary classes clearly read upon any of
> a plurality of policies and class stores implemented via COM classes in Active
> Directory ™.

Examiner notes that Appellant merely asserts that Mishra does not disclose aspects of

Appellant's claim limitations, and as such, has not demonstrated that Mishra does not

actually teach the limitations of Claim 1. Regardless, Examiner maintains that Active

Directory ™ allows one to "quickly find" objects/users in the directory, (per Appellant's

claim language). Further, Examiner finds that Appellant argues the attributes of the

auxiliary class to be "indicative" of files shared by the user and with the user, wherein

the use of the term "indicative" is far broader than the claim language which specifically

reads:

> "creating, by the application, an auxiliary class containing a first attribute, a
> second attribute, and a third attribute, wherein the first attribute is used **to quickly find
> other users that the folders and the files in the home folder have been shared
> with**, the second attribute is used to store the **names of the other users and a path of
> the folders and the files that have been shared with the user**, and the third attribute
> is used to **allow the user and other users with common interests to share folders
> and files of the common interest**."

Additionally, "access control lists" are well-known in the art to exemplify the names,

common interests and paths to other users. Specifically, Access control lists comprise

an auxiliary class of several different attributes pertaining to the access control of

objects, (files, folders, etc.) within the system, per user specification. Inherent to an

access control list are the following:

> The file information – representing what (data) the user is sharing, (and the path
>
> > thereto) – (Class Store)
>
> The user information – representing who you are sharing (the data) with –
>
> > (obviously people with interest in the file)
>
> The privilege information – representing the degree of access control granted

Referring now to Mishra ('589), Examiner notes that Mishra teaches a directory

container centrally managed using "group policies" in addition to a "Class Store" created

under a group policy utilizing an LDAP class store schema, (a standard protocol for

directory access), within an Active Directory ™, (Mishra – Col. 4, lines 63-67 & Col. 5,

lines 1-22). Further, Mishra teaches standard access control properties on the class

store container object, (Col. 5, lines 23-30). As noted herein, standard access control

inherently includes "access control lists", which lists alone or within Active Directory ™

obviously allow one to "quickly find" other users with whom the folders and the files in

the home folder have been shared, per the inherent user information, (as noted above).

Additionally, per the file information and the user information, (noted above), Mishra

teaches an attribute obviously storing the names of the other users and a path of the

folders and the files that have been shared with the user. Simply put, file information

and user information inherently includes paths to and histories for the same. Finally, as

noted herein, the "x:drive" allows the user and other users with common interests to

share folders and files of the common interest per the file, user and privilege

information.

> b.   The combined teachings of O'Brien ('776) and Mishra ('589) do not teach
>   away from the claimed subject matter of Claim 1, (Appeal Brief: p.12, lines
>   22-23).

Examiner points out that it is not enough to assert that O'Brien ('776) does not

disclose a claimed limitation. Rather, the Applicant must show that the combination of

references does not disclose the claimed limitation, as one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See In re Keller, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); In re Merck & Co., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). O'Brien

('776) in combination with Mishra ('589) in fact discloses the Internet file system

described by Appellant. Regarding Appellant's "teaching away" argument, Examiner

further notes paragraphs 40 & 41 from the Final Office Action which read respectively

as follows:

> Regarding Applicant's assertion that O'Brien teaches away from Applicant's
> claimed invention in that O'Brien discloses a database which stores the
> "metadata" associated with the files for searching purposes instead of providing a
> directory that stores a home folder of the user, Examiner notes that the fact that
> O'Brien implements his file system within a relational database does not negate
> the fact that it is still a file system, (Fig. 13).

> Regarding Applicant's assertion that Mishra teaches an application assignment
> scheme which scheme teaches away from Applicant's claimed invention,
> Examiner notes that Applicant's Attorney has erred in her interpretation of what
> constitutes "teaching away", as there is nothing within an application assignment
> scheme or a user profile which would teach away from any of the limitations of
> Claim 25 or the motivation to combine. On the contrary, Mishra discloses an
> Active Directory ™ functionality that is combined with O'Brien. Examiner notes
> that Active Directory ™ is a generic mechanism directed towards resource
> location services and combinable on arbitrary storage devices such as that in
> O'Brien.

Examiner notes that Appellant's claims are ultimately rendered unpatentable over the

combined teachings of O'Brien ('776) and Mishra ('589), which teachings obviously

substitute the database means with a directory means, which substitution clearly

teaches Appellant's invention.

c.   The combined teachings of O'Brien ('776) and Mishra ('589) is not
        improper, (Appeal Brief: p.13, line 18).

Examiner has already addressed this issue within paragraphs 11, 42 & 43 of the final

Office Action as follows:

> To incorporate the centralized class store of Mishra into the O'Brien method for
> configuring an Internet file system would have been obvious to one of ordinary
> skill in the art at the time of invention by Applicant. The motivation to combine
> the centralized class store with the method for configuring an Internet file system

is apparent in that the LDAP directories are designed to manage network resources, and the O' Brien method comprises an X-Drive, (Fig. 13), which is a network resource.

In response to applicant's assertion that there is no suggestion to combine the references, the Examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, MPEP 2143.01 (cited by Applicant's counsel) must be read in light of MPEP 2144 (The Expectation of some Advantage is the Strongest Rationale for Combining References and Rationale Different from Applicant is Permissible). A person having ordinary skill in the art, faced with the problem of administering COM classes stored on O'Brien X:drives would have necessarily been motivated to turn to the centralized administration of Mishra. In fact Mishra states that incorporation of the Mishra reference provides a particularly advantageous means of providing centralized administration of COM classes (Col. 2 lines 15-21). Thus, as Mishra renders an advantage to O'Brien within this context, clearly the motivation to combine is proper.

In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Examiner points out that since motivation to combine O'Brien and Mishra is different from that of Applicant, motivation to combine could not POSSIBLY have been obtained from Applicant's specification.

Thus, Examiner maintains the original rejection of Claim 1 in addition to Claims

2-7, which depend therefrom.

Claim 8

      a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach
           the claimed subject matter of Claim 8, (Appeal Brief: p.15, lines 18-19).

Regarding Appellant's argument that O'Brien ('776) in combination with Mishra ('589)

does not teach:

> "adding, by an application, the first user to a third attribute of the second user;
> adding, by the application, the second user to a third attribute of the first user;
> adding, by the application, a path of the shared file and a user name of the
>   second user to a first attribute of the first user;
> adding, by the application, the path of the shared file and a user name of the first
>   user to a second attribute of the second user; and
> making available, by the application, the first attribute through a folder of the
>   second attribute, wherein the folder belongs to the second user"

Examiner reiterates all arguments relative to Claim 1 above, which arguments clearly

render Appellants sharing of paths and folders obvious. Additionally, Examiner points

out paragraphs 38 & 39 from the Final Office Action as follows:

> Regarding Applicant's assertion that O'Brien does not teach an application,
> Examiner observes that the X:drive is implemented with EJB. Examiner observes
> that EJB is hosted on an application server. Examiner is not convinced by
> Applicant's assertion that an executable or dynamic library installed on an
> application server is not an application and that an application server not a
> server.
>
> Regarding Applicant's assertion that O'Brien does not teach a file system with
> multiple attributes, Examiner notes that attributes include such things as quota,
> limitations and permissions as taught by O'Brien, (Col. 11, lines 11-12).

Examiner notes that per Appellant's teachings, the addition of users to a third

attribute simply means allowing the user and other users with common interests to

share folders and files of the common interest, which teaching is obvious in view of the

O'Brien ('776) "shared internet storage resource", (as noted herein).

Additionally, Examiner notes that per Appellant's teachings, the addition of paths

and user names to a first attribute simply means facilitating the ability to quickly find

other users that the folders and the files in the home folder have been shared with,

which facilitation would have been obvious in view of the combined teachings of O'Brien

('776) and Mishra ('589) which disclose standard access control in addition to Mishra's

teaching of Active Directory ™, (as noted herein).

Moreover, Examiner notes that per Appellant's teachings, the addition of paths

and user names to a second attribute simply means storing the names of the other

users and a path of the folders and the files that have been shared with the user, which

storage would have been obvious in view of the combined teachings of O'Brien ('776)

and Mishra ('589) which disclose standard access control in addition to Mishra's

teaching of Active Directory ™, (as noted herein).

Finally, Examiner notes that per Appellant's teachings, making available, by the

application, the first attribute through a folder of the second attribute, (regardless of

whom the folder belongs to), simply means facilitating the ability to quickly find other

users with whom the (path to) files and folder have been shared as stored within the

directory of the user, which storage and access again would have been obvious in view

of the combined teachings of O'Brien ('776) and Mishra ('589) which disclose standard

access control in addition to Mishra's teaching of Active Directory ™, (as noted herein).

Examiner notes that Appellant finds Examiner's use of the references curious;

however, Examiner points out that within a combined teaching, it is quite common

practice within the PTO to use any part of either reference to render Applicant's

invention unpatentable.

b.   The combined teachings of O'Brien ('776) and Mishra ('589) do not teach
        away from the claimed subject matter of Claim 8, (Appeal Brief: p.16, lines
        13-14).

Examiner notes that this issue has already been addressed above relative to

Claim 1, part b. Additionally, Examiner notes that Appellant's arguments fail to comply

with 37 CFR 1.111(b) because they amount to a general allegation that the claims

define a patentable invention without specifically pointing out how the language of the

claims patentably distinguishes them from the references.

Thus, Examiner maintains the original rejection of Claim 8 in addition to Claims

9-17, which depend therefrom.

Claim 25

a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach
        the claimed subject matter of Claim 25, (Appeal Brief: p.17, lines 18-24).

Examiner reiterates all arguments relative to Claims 1 & 8 above, which

arguments clearly render Appellants directory structure, folders and auxiliary

class/attributes obvious. Additionally, Examiner points out paragraphs 36 & 37 from the

Final Office Action, which read respectively as follows:

Regarding Applicant's assertion that O'Brien does not teach a root folder, Examiner notes that a hierarchical file organization such as that of the X:drive, explicitly has a root, e.g. X:. If X: were not the root, it would be possible to store a file on an X: drive that did not have X: in its path. It is physically, logically, and topologically IMPOSSIBLE for this to be the case in a HIERARCHICAL STRUCTURE. Applicant's counsel is undoubtedly aware of the large body of elementary computer science textbooks regarding file systems (e.g. Tanenbaum, Coulouris, etc.), which define the attributes of a file system. Thus, within the context of the instant application, by definition, X: is the root.

Regarding Applicant's assertion that O'Brien does not teach multiple folders including a home (private) folder and a community (public) folder connected to the root of the file system, Examiner notes that the same is shown in Fig. 13, as noted above.

Thus, Examiner maintains the original rejection of Claim 25 in addition to Claims

26 & 27, which depend therefrom.

Claim 28

a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach the claimed subject matter of Claim 28, (Appeal Brief: p.18, line 18).

Examiner reiterates all arguments relative to Claims 1 & 8 above. Thus,

Examiner maintains the original rejection of Claim 28.

Claim 32

a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach the claimed subject matter of Claim 32, (Appeal Brief: p.19, line 29 & p. 20, line 1).

Examiner reiterates all arguments relative to Claims 1, 8 & 25 above.

Additionally, Examiner notes that the combined teachings of O'Brien ('776) and Mishra

('589) disclose a "shared Internet storage resource" with an Active Directory ™, wherein

the "x:drive" is a home folder and the auxiliary class is the "standard access control" and attributes attributed thereto. Additionally, the community folder, (which inherently includes topics of interest to the user), could be any folder stemming from the home folder, (as the names of the folders within Appellant's specification are configurable), and a group object could be a folder within the community folder, (as Appellant's specification is silent to an exact definition of "user's object", thus the term may be interpreted to include any file or folder).

Thus, Examiner maintains the original rejection of Claim 32 in addition to Claim 33, which depends therefrom.

Claim 34

a.   The combined teachings of O'Brien ('776) and Mishra ('589) in fact teach the claimed subject matter of Claim 34, (Appeal Brief: p.20, lines 19-21).

Examiner points out that it is not enough to assert that O'Brien ('776) does not disclose a claimed limitation. Rather, the Applicant must show that the combination of references does not disclose the claimed limitation, as one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). O'Brien ('776) in combination with Mishra ('589) in fact discloses the Internet file system described by Appellant. Additionally, Examiner reiterates that the combined teachings of O'Brien ('776) and Mishra ('589) disclose a "shared Internet storage resource" with an

Active Directory ™, wherein the "x:drive" is a home folder and the auxiliary class is the

"standard access control" and attributes attributed thereto.

Thus, Examiner maintains the original rejection of Claim 34.

11.3   Issue 3

The combined teachings of O'Brien ('776), Mishra ('589) and Ferraiolo in fact render claims 4-7, 9, 10, 18 & 21-24 unpatentable, (Appeal Brief: p.20, lines 24-25).

Claim 18

a.   The combined teachings of O'Brien ('776), Mishra ('589) and Ferraiolo in fact teach the claimed subject matter of Claim 18, (Appeal Brief: p.21, lines 19-21).

Examiner points out that it is not enough to assert that O'Brien ('776) does not

disclose a claimed limitation. Rather, the Applicant must show that the combination of

references does not disclose the claimed limitation, as one cannot show

nonobviousness by attacking references individually where the rejections are based on

combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA

1981); *In re Merck & Co.,* 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). O'Brien

('776) in combination with Mishra ('589) and Ferraiolo in fact discloses the directory

wherein a temporary user object with an email address is created, a registration form is

submitted, and a determination is made as to whether the email address corresponds to

another user, wherein if it does, the user object is updated as described by Appellant.

Specifically, Examiner notes that a temporary user object is any information existing in a buffer, as a buffer is well-known to be temporary, volatile memory erased when the power is shut off. Thus, any object not saved to permanent memory is obviously temporary. Additionally, an email address is a well-known and obviously unique ID to the user, which user ID is clearly taught by the O'Brien verification process, noted below. Thus, an email address/user ID created for a user and not stored in permanent memory, is a temporary user object with an email address.

Further, the submission of a form of any kind is well-known in the art, thus submission of a registration form would be obvious particularly in light O'Brien ('776), which discloses a "login form", (O'Brien - Fig. 11 & Col.18, lines 33-45) and temporary storage area, (O'Brien - Fig. 11 & Col. 18, lines 46-48). Additionally, Examiner notes that submission of the O'Brien ('776) "login form" is part of a verification/determination process, wherein if authentication (via user ID and password) is not achieved, the "login form" is displayed, obviously for purposes of alternative verification, which alternative verification obviously includes anything unique to the user such as an email address, (as noted above). Examiner notes that an object/user update is extremely well-known in the art for purposes of user authentication during a registration/login, as an update clearly provides the user and the website owner a convenient means by which future login/registrations are unnecessary, adding to the convenience and pleasure of Internet use. Additionally, Examiner notes that Mishra ('589) discloses automatic application updates as available, (Mishra - Col. 6, lines 10-13) which when read in light of O'Brien ('776) obviously discloses an update functionality.

As to Appellant's assertion that Examiner was misguided in using the Ferraiolo

reference as a basis for the rejection, Examiner respectfully disagrees. Specifically

regarding Appellant's assertion that DAC is fundamentally different from RBAC,

Examiner again reiterates paragraph 44 from the Final Office Action, which reads as

follows:

> Regarding Ferraiolo, Applicant's asserts that Examiner did not present an
> obviousness prima facie case. Applicant offers the rationale that the Ferraiolo
> reference states that DAC is not the same as RBAC and thus cites a contrary
> teaching. Regarding the Ferraiolo reference, Examiner points out that
> Applicant's counsel is misguided in misinterpreting historical information (e.g.
> DAC) as part of the RBAC being combined. Examiner notes that the Ferraiolo
> paper was the seminal paper introducing RBAC to the computer science
> community, and as such, Ferraiolo was obliged to describe the state of the prior
> art, specifically DAC and MAC, in order to introduce the improvement to access
> control provided by RBAC. Since it is RBAC and not DAC being combined, any
> discussion regarding DAC is misleading and irrelevant. Furthermore, the
> quantum leap of incorporating historical background information as part of a
> combination is incomprehensible.

Additionally, Examiner notes that the reason the Ferraiolo reference was added was to

specifically teach protecting the integrity of the information, in other words, who can

perform what acts on what information, (Ferraiolo, p.4). As Appellant has claimed a

registration and update means, Examiner has specifically shown the same within the

Ferraiolo reference, which reference clearly teaches a set of transactions allocated to a

role, which transactions are a procedure, (program), plus a set of associated data items,

and wherein each role has an associated set of individual members and membership to

the group/role is granted and revoked as needed, (Ferraiolo, p.7). Thus, when read in

light of the O'Brien ('776) login/verification process and the Mishra ('589) directory,

Ferraiolo obviously teaches a means by which a directory is updated via a registration

process utilizing an ID unique to the user, which ID could obviously be an email, as

noted herein above. Moreover, again, Examiner reminds Appellant that it is the

combined teachings of all three references in their entirety, which comprise the basis for

the rejection, and as such must be overcome in their entirety, as noted within the MPEP

§ 2145 (IV), which reads as follows:

> One cannot show nonobviousness by attacking references individually
> where the rejections are based on combinations of references. In re
> Keller, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); In re Merck & Co.,
> Inc., 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

b.   The combined teachings of O'Brien ('776), Mishra ('589) and Ferraiolo in
        do not teach away from the claimed subject matter of Claim 18, (Appeal
        Brief: p.23, lines 1-2).

Examiner reiterates paragraphs 45 & 23 from the Final Office Action, which read

respectively as follows:

> Applicant's remaining assertions concerning subject matter not taught by the
> O'Brien, Mishra, Ferraiolo combination, and that such combination teaches away
> from the claimed invention and that the combination of references is improper,
> has already been addressed as noted herein above.

> To incorporate the Ferraiolo Role-Based Access Control functionality within the
> O'Brien Shared Internet storage system would have been obvious to one of
> ordinary skill in the art at the time of invention be Applicant. The motivation for
> the combination is found within O'Brien wherein O'Brien provides a means by
> which individual users or groups of users share Internet-stored files, (Col. 4, lines
> 13-43). To grant rights based on individual roles or roles within groups would
> have been obvious and necessary considering the very nature of a shared
> resource. Moreover, Role-Based Access Control would also be an obvious
> functionality as incorporated within the Mishra class store schema, as Mishra
> employs directory containers managed by specified group policies, (Col. 4, lines
> 63-67). As noted above, granting rights based on individual roles or roles within
> groups would have been obvious and necessary considering the very nature of a
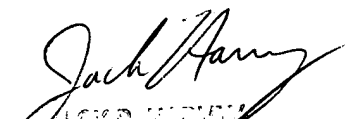> shared resource.

Examiner notes that Appellant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Additionally, Appellant argues the references individually, ultimately deciding that the combined teachings merely teach "how to prevent unauthorized access in different ways" rather than "a user sharing a folder with another user", (Appeal Brief, p. 23, lines 6-8). Examiner respectfully disagrees noting that the teachings disclosed herein relative to Claims 1, 8, 18, 25, 28, 32 & 34 clearly and obviously disclose "a user sharing a folder with another user". Additionally, Examiner again cites O'Brien's specific enumeration of the same, (Col. 3, line 66-67 & Col. 4, lines 1-6).

Thus, Examiner maintains the original rejection of Claim 18 in addition to Claims 19-24, which depend therefrom.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Arrienne M. Lezak

Conferees

David A. Wiley, Bunjob Jaroenchonwanit

Jack Harvey

DAVID WILEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100